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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,140

02/04/2004

John E. Poniatowski

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21005

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04/05/2006

EXAMINER

NGUYEN, TUYEN T

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ART UNIT

PAPER NUMBER

2832

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

3/

Office Action Summary

Application No.

10/772,140

Applicant(s)

PONIATOWSKI ET AL.

Examiner

TUYEN T. NGUYEN

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2, 10, 13 and 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11, 12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/16/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I, embodiment 2, figures 3A-3B, claims 1, 3-9 and 11-16 in the reply filed on 1/17/2006 is acknowledged. The traversal is on the ground(s) that claims 1, 3-9 and 11-16 read on the elected species of figures 3A-3B. This is not found persuasive because claim 13 does not read on the elected species. Claims 1, 3-9, 11-12 and 14-16 will be examined herewith.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-4, 6-9 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett [US 5,737,203] in view of Kober [US 3,212,039].

Barrett discloses a transformer [figure 3A] comprising:

- a main magnetic core [42] having a center leg [48] and two outer legs [44, 46];
- a control magnetic core [42] coupled to the main core and having a center leg [48] and two outer legs [44, 46];
- a gap between the center legs of the main magnetic core and the control magnetic core;

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- a main winding [50] wound about the center leg of the main core; and
- a control winding structure including a first control winding [54] and a second control winding [56] wound about the outer legs of the control core, wherein the first and second control windings formed of multiple turns.

Barrett discloses the instant claimed invention except for the specific configuration of the control winding.

Kober discloses a variable transformer [figure 3-7] comprising:

- a magnetic E-core [1] having a winding [12] wound about a center leg thereof and two other windings [15, 16] wound about the outer legs thereof; and

- a magnetic I-core [22] coupled to the center leg and two outer legs of the E-core.

wherein one of the winding formed in figure eight configuration.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use figure eight configuration of Kober's winding for the control winding of Barrett for the purpose of controlling the inductance of the device.

Regarding claims 6-7 and 14-15, Litz wire is a known conductor for use in transformer/inductor.

Claims 3-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett in view of Kober as applied to claims 1 and 9 above, and further in view of Spreadbury [US 3,686,561].

Barrett in view of Kober discloses the instant claimed invention except for the specific core structure.

Spreadbury discloses a magnetic device [figure 10] comprising:

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- two magnetic E cores [156', 158'];
- a magnetic I core [152] disposed between the E cores;
- a non-magnetic spacer [160] disposed between the I core and one of the E core providing a gap between one of the E core and the I core; and
- at least one winding [182, 186] wound about the center leg of the E core.

It would have been obvious to one having ordinary skilled in the art at the time the invention was made to use E-I-E core design of Spreadbury for the core of Barrett, as modified, for the purpose of regulating/controlling magnetic flux.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN T. NGUYEN whose telephone number is 571-272-1996. The examiner can normally be reached on M-F 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ELVIN ENAD can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTN TTN

Tuyen Nguyen